No. 7500083

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Saatzucht Steinach - Dr. M. von Schmieder Nachf.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC ED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EX- OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, RTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT 2, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PERENNIAL RYEGRASS

'Loretta'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 11th *day of* September *in the year of our Lord one thousand nine hundred and* eighty.

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(12-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	FOR OFFICIAL USE ONLY
Loretta	Perennial Ryegrass	PV NUMBER 7500083
3. GENUS AND SPECIES NAME	4. FAMILY NAME *(Botanical)*	FILING DATE 3.15.75 / TIME 10 A.M.
Lolium Perenne	Graminae	FEE RECEIVED $ 250.00 $ 250.00 $ 250.00 / BALANCE DUE $ $ $
	5. DATE OF DETERMINATION 1968 Est per letter dated 2/27/79.	
6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
Saatzucht Steinach Dr.M.von Schmieder Nachf.	8441 Steinach ueber Straubing West Germany	A/C 09428 No 515

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
Same as 6	West Germany	1920

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

O.M. Scott and Sons Co.
Marysville, Ohio 43040

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Botanical Description of the Variety
- [X] 13C. Exhibit C, Objective Description of the Variety
- [X] 13D. Exhibit D, Data Indicative of Novelty
- [X] 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [ ] YES [X] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [ ] YES [ ] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? [ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

20.2.1975
(DATE)

E. Grundler
E.Grundler (SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.

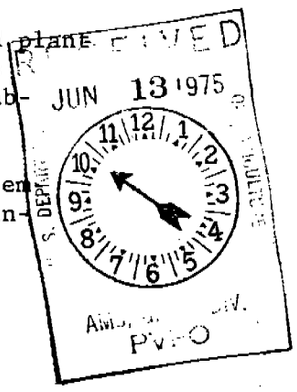
13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.

13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.



LORETTA PERENNIAL RYEGRASS

Plant Variety Protection Exhibits

13A - Exhibit A

Original material of Loretta was selected in pastures in the Burgenland of Austria. It was collected in 1965 and through selective multiplication cultivated to the present variety. The variety is reproduced by several of the selected clones.

13B - Exhibit B

Loretta is a late maturing variety in seed production fields. Flowering, seed head development, and seed yield is high. Growth habit in all development stages is some what prostrate.

Seed head formation in mowed turf is less than Manhattan.

13C - Exhibit C

Objective descriptive form attached along with English translation of German plant protection descriptive form.

13D - Exhibit D

Loretta exhibits the following improved characteristics in comparison to other late maturing varieties:
a high degree of tolerance to traffic; develops a dense turf; has a fine leaf texture; and is medium to light green in color; vertical regrowth is slower; has excellent tolerance to low mowing heights; has good cold tolerance; very good resistance to various diseases especially in respect to powdery mildew and rust; and has higher seed number per pound (389,000 seeds per pound) of seed than most other commercially available perennial ryegrasses.

Exhibit A Expansion:

The present type was selected after testing for three successive generations of the original plant material. Selection of plant material was based on disease resistance, persistance, winter hardiness and adaptability as a turfgrass. Other factors taken into consideration were fine leaved blades, stability, medium stem length, good mowing or cutting characteristics (lack of shredding) and uniform growth habit. The number of clones obtained has not been officially determined but would be quite high. Certified seed would be from third generation.

Percentage of off-types was identified as being in accordance with the defined Bundessortenamt regulations for cross pollinated plants.

13D. Loretta is fine textured having a leaf blade width of 6 mm. narrower than Pelo and only 0.5 mm. wider than Manhattan. Growth habit of Loretta is less erect than Manhattan.

Growth habit	Manhattan	Loretta
Mature stage	Medium	Semi-erect
Regrowth stage	Medium	Semi-erect

Loretta varies distinctively in lateness of spiking compared to Manhattan. The start of the spiking stage is on the average four to five days later for Loretta than it is for Manhattan.

Spiking stage	Manhattan	Loretta
Start	Medium to late	Late to very late

Reference: Response to U.S.D.A. letter dated September 8, 1976, requesting additional information.

13A (3) Percentage of off-types or variants found in Loretta fields were in the range of 3 to 5 percent.

Off-type plants differed from Loretta in respect that

a) majority of off-type plants headed out earlier.

b) panicle length was either shorter or longer than Loretta.

13A (4) These off-type plants were found at the same percentage levels in different generations. Five percent off-type plants were noted in certified seed.

13D In overall performance Loretta is most similar to Manhattan. On the average Loretta is four to five days later than Manhattan and two days later than Pelo in the initiation of spiking stage when grown in Germany.

We do not have color chart readings of Loretta; however, color of Loretta is lighter green than Manhattan or Pennfine.

Qualitative Color Data

turfgrass performance plots Marysville, Ohio

Variety	Color				
Dates:	4/9/75	8/3/75	9/8/75	9/22/75	11/5/75
Loretta	4.7	7.1	7.1	7.2	7.7
Manhattan	4.9	7.3	7.6	7.5	7.7
Pennfine	5.0	7.3	7.5	7.4	7.6

Rating Scale: 1 = brown straw-colored
10 = dark green

EXHIBIT D. Data Indicative of Novelty

Loretta is most similar to Manhattan except it shows the following listed novel characteristics:

1. Flowering of Loretta perennial ryegrass.

   First heading date for Loretta perennial ryegrass is at least four to five days later than Manhattan perennial ryegrass.

2. Color of Loretta perennial ryegrass.

   Color of Loretta perennial ryegrass is medium to light green and is lighter in color than Manhattan perennial ryegrass. Manhattan perennial ryegrass color could be described as medium to moderately dark green.

3. Loretta seed per pound.

   Loretta perennial ryegrass has a significantly smaller seed than Manhattan perennial ryegrass. Seed counts per pound for five years show a consistent and significant difference in this regard.

	Seed Count No./Lb.				
	1974	1975	1976	1978	1979
Loretta	389,078	384,084	440,834	394,677	368,648
Manhattan	246,682	266,044	360,930	241,982	302,364

SCOTTS
THE LAWN PEOPLE

O M Scott & Sons
Marysville, Ohio 43040
(513) 644-0011

September 26, 1979

CERTIFIED MAIL

Mr. Bernard M. Leese, Commissioner
Plant Variety Protection Office
USDA-AMS
Grain and Seed Division
National Agricultural Library Bldg.
Beltsville, MD 20705

SUBJECT: Perennial Ryegrass Application No. 7500083,'Loretta'

Dear Mr. Leese:

This letter is in response to your letter of September 7, 1979 and Mr. Eldon E. Taylor's letter of April 2, 1979.

Mr. Taylor's letter asked for clarification of the heading date of Loretta vs. Manhattan since there was some variability in the date of heading initiation. Most of the variation found in heading date can be attributed to different environmental conditions that affect heading as well as the age of stand. This variability can be expected to be greater when the genetic background is quite different as in the case of Manhattan and Loretta. To help minimize the variability found in heading date, we obtained data on the date of 50% heading on comparable well established stands of Manhattan and Loretta in 1978 and 1979 near Gervais, Oregon located in the Willamette Valley. The date of 50% heading tends to be less variable than the date of initial heading.

	Date of 50% Heading	
	1978	1979
Manhattan	June 6	June 6
Loretta	June 10	June 10

These data compare quite well with the data from Germany which shows that Loretta is four to five days later than Manhattan.

If you have other questions, please advise.

Sincerely,

John A. Long, Director
Agronomic Research &
Seed Technology

JAL:dln

FORM APPROVED: OMB NO. 40-R3712

FORM GR-470-36
(9-76)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

OBJECTIVE DESCRIPTION OF CULTIVARS
RYEGRASS
(Lolium spp.)

NAME OF APPLICANT(S)	VARIETY NAME OR TEMPORARY DESIGNATION
Saatzucht Steinach Dr. M. von Schmieder Nachf.	Loretta
ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code)* 8441 Steinach Uber Straubing West Germany	FOR OFFICIAL USE ONLY PVPO NUMBER 7500083

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in first box (e.g. [0][8][9] or [0][9])when number if either 99 or less or 9 or less. Descriptions of characters should represent those that are typical for the variety. Ranges may be given also. Measured data should be for SPACED PLANTS. Give additional description for all characteristics that cannot be adequately described in the form below. Append all petrinent comparative trial and evaluation data.

1. SPECIES:

[2] 1 = L. MULTIFLORUM (annual or Italian: includes Westerwoldicum) 2 = L. PERENNE (perennial) 3 = L. RIGIDUM (includes Wimmera)
4 = HYBRID (of species) _____ 5 = OTHER *(Specify)* _____

2. PLOIDY:

[1] 1 = DIPLOID 2 = TETRAPLOID 3 = OTHER *(Specify)* _____

3. DURATION:

[3] 1 = ANNUAL OR BIENNIAL 2 = SHORT LIVED PERENNIAL (3-4 years) 3 = PERENNIAL (more than 4 years)

STANDARD CULTIVARS

1 = GULF 2 = WIMMERA 62 3 = LINN 4 = PELO
5 = NORLEA 6 = ABERYSTWYTH S-23 7 = MANHATTAN 8 = PENNFINE

4. MATURITY (50% HEADED) Use standards from above for comparison:

[7] 1 = VERY EARLY 3 = EARLY 5 = MEDIUM 7 = LATE 9 = VERY LATE

[ ][ ] DAYS EARLIER THAN . . . . . [ ] STANDARD CULTIVAR
[0][5] DAYS LATER THAN . . . . . [7] STANDARD CULTIVAR

5. MATURE PLANT HEIGHT (Use standard cultivars from above) :

[0][7][6] CM. HIGH [0][0][2] CM. SHORTER THAN . . . . . [7] STANDARD CULTIVAR
[ ][ ][ ] CM. TALLER THAN . . . . . [ ] STANDARD CULTIVAR

6. PERCENT WINTER DAMAGE (estimated as percent of the area appearing dead). Use standard cultivars from above for comparison:

[0][0][0] PERCENT DAMAGE OF APPLICATION CULTIVAR
[0][2][5] PERCENT DAMAGE OF . . . . . [3] STANDARD CULTIVAR

XE exc. of 6-13-76

7. TURF DENSITY Use standard cultivars from above:

[ ][ ][ ] TILLERS PER 100 SQ. CM.
[0][0][0] LESS TILLERS PER 100 SQ. CM. THAN . . . . [7] STANDARD CULTIVAR
[ ][ ][ ] MORE TILLERS PER 100 SQ. CM. THAN . . . [ ] STANDARD CULTIVAR

8. FLAG LEAF (at full growth) Use standard cultivars from above:

[0][1][8] CM. LENGTH (from ligule to tip) [0][5.][7] MM. WIDTH (at widest point)
[ ][ ][ ] CM. SHORTER THAN . . . . . [ ] STANDARD CULTIVAR
[0][0][1] CM. LONGER THAN . . . . . [7] STANDARD CULTIVAR
[ ][ ][ ] MM. NARROWER THAN . . . . . [ ] STANDARD CULTIVAR
[0][0.][5] MM. WIDER THAN . . . . . [7] STANDARD CULTIVAR

[3] FLAG LEAF AT BOOT STAGE: 1 = DEFLEXED 3 = RECURVED 5 = HORIZONTAL 7 = SEMI-ERECT 9 = ERECT

WEST GERMAN FEDERAL PLANT VARIETY OFFICE

(ENGLISH TRANSLATION)

APPENDIX TO RESOLUTION
BY THE PLANT VARIETY
COMMITTEE 4
Dated: March 21, 1975

VARIETY DESCRIPTION

Species: German Ryegrass (Lolium perenne L.)

Variety Name: Loretta Reg. No.: WD 121

Applicant: Saatzucht Steinach, Dr. M. von Schmieder Nachfolger

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A. Classification

Category: Diploid

Sub-Category: -

B. Established Characteristics

Seed:

Weight per thousand: very low to low

Plant:

Height

- Seedling Stage: short to medium
- Maturing Stage: short
- Regrowth Stage: short

Growth Habit

- Seedling Stage: semi-erect
- Maturing Stage: semi-erect
- Regrowth Stage: semi-erect

Color

- Seedling Stage: medium to dark green
- Regrowth Stage: medium green

Stem:	
Length (with inforescence):	short to medium
Leaves:	
- Seedling Stage:	erect - slightly recurved
- Regrowth Stage:	erect
Color prior to spiking:	medium to dark green
Flag Leaf:	slightly recurved
Stand:	close knit
Length:	medium
Width:	narrow to medium
Inforescence:	
Length:	short to medium
Ploidy:	diploid
No. of chromosomes:	2 n = 14
Spiking Stage:	
Start:	late to very late
Seedling Stage:	absent

C. Differentiation

The differentiation of the variety is specifically based on the late to very late start of spiking, the short to medium stem length, short growing height during the maturing and regrowth stage, the semi-erect growth habit during the seedling stage, maturing stage and during regrowth and the low to medium tendency of spiking following mowing.

D. Comments

None

E. Adaptation and Intended Use: Turfgrass

(The variety was not tested for agricultural use).

Signature Signature Signature

Notarization

13E - Exhibit E

Single plant selection was made by Erich Frank, 8441 Steinach, Straubinger St. 6. Mr. Frank was the former manager of plant breeding at Steinach. The variety became the property of Saatzucht Steinach through employer/employee agreement.

FORM APPROVED: OMB NO. 40-R3712

FORM GR-470-36
(9-76)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

OBJECTIVE DESCRIPTION OF CULTIVARS
RYEGRASS
(Lolium spp.)

NAME OF APPLICANT(S): Saatzucht Steinach
Dr. M. von Schmieder Nachf.

VARIETY NAME OR TEMPORARY DESIGNATION: Loretta

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)
8441 Steinach Uber Straubing
West Germany

FOR OFFICIAL USE ONLY

PVPO NUMBER: 7500083

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in first box (e.g. [0][8][9] or [0][9].)when number if either 99 or less or 9 or less. Descriptions of characters should represent those that are typical for the variety. Ranges may be given also. Measured data should be for SPACED PLANTS. Give additional description for all characteristics that cannot be adequately described in the form below. Append all petrinent comparative trial and evaluation data.

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[1] 1 = DIPLOID 2 = TETRAPLOID 3 = OTHER (Specify) _____

3. DURATION:

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1 = GULF 2 = WIMMERA 62 3 = LINN 4 = PELO
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4. MATURITY (50% HEADED) Use standards from above for comparison:

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[ ][ ] DAYS EARLIER THAN . . . . . [ ] STANDARD CULTIVAR
[0][5] DAYS LATER THAN . . . . . [7] STANDARD CULTIVAR

5. MATURE PLANT HEIGHT (Use standard cultivars from above) :

[0][7][6] CM. HIGH [0][0][2] CM. SHORTER THAN . . . . . [7] STANDARD CULTIVAR
[ ][ ][ ] CM. TALLER THAN . . . . . [ ] STANDARD CULTIVAR

6. PERCENT WINTER DAMAGE (estimated as percent of the area appearing dead). Use standard cultivars from above for comparison:

[0][0][0] PERCENT DAMAGE OF APPLICATION CULTIVAR
[0][2][5] PERCENT DAMAGE OF . . . . . [3] STANDARD CULTIVAR

XE exc of 8-13-76

7. TURF DENSITY Use standard cultivars from above:

[ ][ ][ ] TILLERS PER 100 SQ. CM.
[0][0][0] LESS TILLERS PER 100 SQ. CM. THAN . . . . [7] STANDARD CULTIVAR
[ ][ ][ ] MORE TILLERS PER 100 SQ. CM. THAN . . . [ ] STANDARD CULTIVAR

8. FLAG LEAF (at full growth) Use standard cultivars from above:

[0][1][8] CM. LENGTH (from ligule to tip) [0][5.][7] MM. WIDTH (at widest point)
[ ][ ][ ] CM. SHORTER THAN . . . . . [ ] STANDARD CULTIVAR
[0][0][1] CM. LONGER THAN . . . . . [7] STANDARD CULTIVAR
[ ][ ][ ] MM. NARROWER THAN . . . . . [ ] STANDARD CULTIVAR
[0][0.][5] MM. WIDER THAN . . . . . [7] STANDARD CULTIVAR

[3] FLAG LEAF AT BOOT STAGE: 1 = DEFLEXED 3 = RECURVED 5 = HORIZONTAL 7 = SEMI-ERECT 9 = ERECT

STANDARD CULTIVARS

1 = GULF 2 = WIMMERA 62 3 = LINN 4 = PELO
5 = NORLEA 6 = ABERYSTWYTH S-23 7 = MANHATTAN 8 = PENNFINE

9. LEAVES:

[3] VERNATION: 1 = LEAVES ROLLED IN YOUNG SHOOTS; 2 = LEAVES SEMI-ROLLED (folded with rolled edges); 3 = LEAVES FOLDED IN YOUNG SHOOTS

West German Description - Medium to Dark Green. In U.S. Turf Trials Would Rate Light or Yellow Green. Color Would Be Lighter Than Pennfine or Manhattan

[1][0][0] % PLANTS WITH ANTHOCYANIN IN LOWER LEAF SHEATH

[2]* FOLIAGE COLOR: 1 = YELLOW GREEN; 2 = MEDIUM GREEN; 3 = BLUE GREEN

KE Enc 6-13-76

10. SPIKE:

[ ][ ][ ] MM. SPIKE LENGTH (tip to internode below lowest floret)

[ ][ ] MM. SHORTER THAN . . . . . [ ]
[ ][ ] MM. LONGER THAN . . . . . [ ]
} USE STANDARD CULTIVARS FROM ABOVE

[ ][ ][ ][ ] MG. PER TEN SPIKES (trimmed to internode below lowest floret)

[ ][ ][ ][ ] MG. LIGHTER PER TEN SPIKES THAN . . . . . [ ]
[ ][ ][ ] MG. HEAVIER PER TEN SPIKES THAN . . . . . [ ]
} USE STANDARD CULTIVARS FROM ABOVE

[ ][ ] FLORETS PER SPIKELET

PERCENTAGE OF PLANTS WITH:

RACHIS: [ ][ ][ ] % SMOOTH [ ][ ][ ] % ROUGH

SPIKE COLOR: [ ][ ][ ] % GREEN [ ][ ][ ] % PURPLE

LEMMA: [0][0][0] % AWNED [ ][ ][ ] MM. AWN LENGTH

[ ][ ] MM. GLUME LENGTH [ ] 1 = SPIKELET LENGTH NEARLY EQUAL TO OUTER GLUMES; 2 = SPIKELET LENGTH MUCH LONGER THAN OUTER GLUMES

11. COLEOPTILE:

~~[1][0][0]~~ % PLANTS WITH ANTHOCYANIN IN COLEOPTILE

~~KE Enc 6-13-76~~ 3-24-77

12. ANTHER COLOR:

[ ][ ][ ] % PLANTS WITH WHITE ANTHERS [ ][ ][ ] % PLANTS WITH YELLOW ANTHERS

[ ][ ][ ] % PLANTS WITH PURPLE ANTHERS

13. ROOT AND PLANT CHARACTERS:

[ ][ ][ ] % PLANTS WITH PROSTRATE GROWTH HABIT [ ][ ][ ] % PLANTS WITH FLUROESCENT ROOTS

[ ][ ][ ] % PLANTS WITH UPRIGHT GROWTH HABIT

14. SEED:

[1.][2][0] gr. MG. PER 1,000 SEED

[0][5][0] MM. TOTAL LENGTH OF 10 SEEDS

[0][1][1] MM. TOTAL WIDTH OF TEN SEEDS

Marysville Data

15. **DISEASE (0 = NOT TESTED, 2 = HIGHLY SUSCEPTIBLE, 4 = MODERATELY SUSCEPTIBLE, 6 = MODERATELY RESISTANT, 8 = HIGHLY RESISTANT):** Marysville Data

8	CROWN RUST (Puccinia coronata)	4	DOLLAR SPOT (Sclerotinia)	0	BROWN PATCH (Rhizoctonia)
6	LEAF SPOT (Helminthosporium)	8	MILDEW		OTHER *(Specify)*
0	SNOW MOLD (Typhula)	2	RED THREAD (Corticium)		

16. **INSECT (0 = NOT TESTED, 2 = HIGHLY SUSCEPTIBLE, 4 = MODERATELY SUSCEPTIBLE, 6 = MODERATELY RESISTANT, 8 = HIGHLY RESISTANT):**

0 *(Specify)* _____

17. **GIVE RESEMBLANCE VALUE IN LEFT COLUMN AND VARIETY CODE NUMBER IN RIGHT COLUMN FOR VARIETY WITH WHICH COMPARISON IS MADE (1 = LESS THAN, 2 = SAME AS, 3 = MORE ERECT, MORE RESISTANT, DENSER, MORE PERSISTENT, DARKER OR GREATER HEIGHT.):**

RESEMBLANCE	CHARACTER	SIMILAR VARIETY	
2	PLANT HABIT (erectness)	7	1 = GULF
2	TILLERING	7	2 = WIMMERA 62
3	WINTER HARDINESS	7	3 = LINN
2	HIGH TEMP. STRESS RESISTANCE	7	4 = PELO
3	TURF PERSISTENCE	7	5 = NORLEA
1	PLANT COLOR	7	6 = ABERYSTWYTH S-23
1	VERTICAL SEEDLING GROWTH RATE	7	7 = MANHATTAN
2	CROWN DENSITY	7	8 = PENNFINE
3	MOWER SHREDDING RESISTANCE	7	

18. **GIVE AREA OF ADAPTATION AND INTENDED USE:** Turfgrass

19. **GIVE AREA TEST RESULTS PRESENTED FROM:** West Germany and Marysville, Ohio where indicated

COMMENTS: